

A3
Cancelled

17. A semiconductor device according to any one of claims 11-16, wherein said semiconductor device is incorporated into an electronic device selected from the group consisting of a personal computer, a projector, a digital camera, a video camera, a head mounted display, a portable information terminal, a navigation system, a game machine, an image playback machine and a music playback machine.--

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the present application.

The Examiner's non-final Office Action dated December 7, 2002 has been received and its contents carefully noted. Claims 1-3 and 10 were pending in the present application. By this amendment, claims 1-3 and 10 have been amended and new claims 11-17 have been added. No new matter has been added by this amendment. Accordingly, claims 1-3 and 10-17 are now pending, of which claims 1-3 and 11-16 are independent.

Claims 1-3 are Not Anticipated by JP '676

Claims 1-3 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the Japanese Patent No. 404152676 (JP '676). In Figure 1(g) of JP '676, the Applicants appreciate that an active layer has convex portions 1-9 and 1-10 as shown in enclosed lines. However, the convex portions of JP '676 are source and drain regions, and the channel forming region itself 1-6 does not have the convex portion. In contrast, amended claims 1-3 disclose a convex or concave portion in a channel forming region, as shown in Figures 1A-1C, 16A-16E and 17A-17E of the present invention. All of the elements of the claims are not disclosed by the prior art either explicitly or inherently; therefore, the prior art does not anticipate claims 1-3, and the rejection under § 102(b) should be withdrawn.

Claim 10 is Patentable Over JP '676 and Shimizu

Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '676, as applied to claims 1-3 above, and further in view of Shimizu et al., U.S. Patent No. 6,188,085 (Shimizu). The Applicants respectfully contend that the Examiner has failed to set forth a *prima facie* case of obviousness. The prior art does not teach or suggest all the elements of the claims, either explicitly or inherently. Please incorporate by reference the arguments *supra* with respect to the deficiencies of JP '676. Shimizu does not correct the deficiencies in JP '676. Neither JP '676, nor JP '676 in view of Shimizu teaches or suggests a convex or concave portion in a channel forming region.

For the reasons stated above, the Examiner has failed to set forth a *prima facie* case of obviousness; therefore, the Applicants respectfully request that the Examiner withdraw the § 103 rejections.

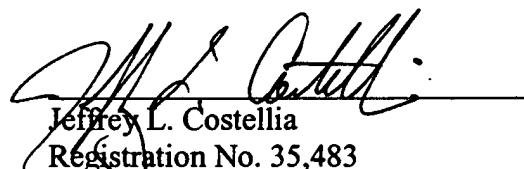
New Claims 11-17

New claims 11-17 disclose a convex or concave portion in a channel forming region, as shown in Figures 1A-1C, 16A-16E and 17A-17E of the present invention.

Conclusion

Having responded to all rejections set forth in the outstanding non-final Office Action, it is submitted that the claims are now in condition for allowance. An early and favorable Notice of Allowance is respectfully solicited. In the event that the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the above claims, the Examiner is courteously requested to contact Applicants' undersigned representative.

Respectfully submitted,



Jeffrey L. Costellia
Registration No. 35,483

NIXON PEABODY LLP
8180 Greensboro Drive, Suite 800
McLean, Virginia 22102
(703) 790-9110
(703) 883-0370 FAX

MARKED-UP VERSION OF AMENDED CLAIMS

1. (Amended) A semiconductor device comprising a TFT containing an active layer having a convex portion or a concave portion in a channel forming region [or in the vicinity of the channel forming region].

2. (Amended) A semiconductor device comprising a TFT containing an active layer having a convex portion or a concave portion in a channel forming region [or in the vicinity of the channel forming region],

wherein zero or one grain boundary is contained in the channel forming region.

3. (Amended) A semiconductor device comprising a TFT containing an active layer having a convex portion or a concave portion in a channel forming region [or in the vicinity of the channel forming region],

wherein the number of grain boundaries crossing the channel forming region in the width direction of the channel is zero or one.

10. (Amended) A semiconductor device according to any one of claims 1 to 3 [and 5 to 7], wherein said semiconductor device is incorporated into an electronic device selected from the group consisting of a personal computer, a projector, a digital camera, a video camera, a head mounted display, a portable information terminal, a navigation system, a game machine, an image playback machine and a music playback machine.